



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,812	10/29/2003	Christina Bock	11341-1	6759

7590 11/01/2007  
J. Wayne Anderson  
National Research Council of Canada  
Bldg. M-58, Room EG-12  
1200 Montreal Road  
Ottawa, ON K1A 0R6  
CANADA

EXAMINER
----------

HENDRICKSON, STUART L

ART UNIT	PAPER NUMBER
----------	--------------

1793

MAIL DATE	DELIVERY MODE
-----------	---------------

11/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/694,812	<b>Applicant(s)</b> BOCK ET AL.	
	<b>Examiner</b> Stuart Hendrickson	<b>Art Unit</b> 1793	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4-15, 17-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-15 and 17-21 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1793

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4-10 and 20 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Laine et al. 6551960.

The previous rejection is incorporated herein by reference.

Claims 1, 4-15, 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laine taken with Wang article.

Laine does not teach the synthesis. Wang teaches on pg. 1623 in particular how to make Pt, Ru nanoparticles using ethylene glycol and alkali. The pH, if not inherently possessed, is an obvious expedient to assure metal deposition. Using the synthesis of Wang in the process of Laine is an obvious expedient as a way to make the nanoparticles desired by Laine. The examiner takes Official Notice that the techniques not explicitly disclosed (spraying of claim 13 for example) are old and known to put metals on supports, and are hence obvious as expedients to make the material desired by Laine.

Claims 1, 4-7, 9, 11-15, 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoster article taken with Wang.

Hoster teaches on pg. 498 PtRu of 75:25. While not teaching the particle size, Wang teaches a synthesis of Pt and Ru nanoparticles. Using the synthesis of Wang to make the materials of Hoster is an obvious expedient to make the desired nanoparticles; both references are interested in the catalyst properties of metal particles (Hoster mentions fuel cells and Wang teaches visible-light hydrogen evolution).

Applicant's arguments filed 9/5/07 have been fully considered but they are not persuasive.

Art Unit: 1793

The argument concerning Laine is noted, but the reference is deemed to create the claimed size particles, which would not be visible (the white spots in the micrographs). It is evident that many of the visible white spots are smaller than the 50 nm range that applicant argues that Laine is limited to. Applicants should repeat the experiments of Laine and provide TEM data to prove the size of the particles made. A 102/103 is not a 102 and a 103. It is a special rejection, used in limited circumstances. If the citation of the Atrofina caselaw is meant to convey the notion that overlapping ranges are not worthy of a rejection, then this is not accepted. See *In re Malagari* 182 USPQ 549, for example. The addition of the Wang reference and discussion of the process should not come as any surprise, because the additional claims rejected by the addition of Wang are process claims. No patentable difference between a pH of '12' versus '>12' is seen; *Titanium Metals V. Banner* 227 USPQ 773 and *In re Kirsch* 182 USPQ 286. It is not seen why pH control has one effect for the applicant, yet a different effect in the references. Concerning Holster, the reference alludes to reference 23 and deposition techniques on pg. A496. These should be submitted in order to evaluate the particles taught by Hoster.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.



Stuart Hendrickson  
examiner Art Unit 1754